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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,809	09/29/2003	Tae-Kyung Kim	02-ASD-271 (EM)	2210

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EXAMINER

PATEL, VISHAL A

ART UNIT

PAPER NUMBER

3673

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/673,809	KIM, TAE-KYUNG	
	Examiner	Art Unit	
	Vishal Patel	3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 27 is/are rejected.
- 7) ☐ Claim(s) 19-26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10, line "an extension", this should be changed to --said extension--. Claim 9 mentions an extension and claim 10 is dependent from claim 9.

3. Claim 19 recites the limitations "the juncture" and "said edge seating surface" in lines 1 and 10-11, respectively. There is insufficient antecedent basis for this limitation in the claim. The limitation "said edge seating surface", maybe --said edge of the sealing surface-- as mentioned in claim 11, line 4.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-7, 9-10, 11, 13, 15-18 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Mercer et al (US. 3,330,567).

Mercer discloses a method of sealing at a juncture of three members at assembly comprising:

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The step of forming a one piece seal of elastically deformable material having a first, second and third portion each extending in a discrete direction from a common region (region having 70 and 72) thereof and configured for sealing the juncture of the three member (members 12, 14 and 28). The step of forming a strain distributor (72 or 70) of material significantly less deformable than the first, second and third portions and embedding the distributor in the common region. The step of disposing the seal with the first, second and third portion sealing on the three members (first 62a, second portion below 46 and contacting 14 and third is lip 38).

The distributor is disposed in the common region at a juncture of two of the first, second and third portions thereof (the distributor 72 or 70 is disposed at a juncture of two of the portions).

The distributor is formed of material having a hardness of at least 10 on the Shore A greater than the common region (this is the case since the spring 72 and cable 70 are made of steel and the seal is formed of rubber or elastomeric material).

The distributor is formed of one of elastomeric, metallic and plastic material.

The step of forming a one-piece seal includes molding (column 5, lines 30-42).

The step of disposing the distributor includes insert molding (column 5).

The step of forming a one-piece seal includes molding a member of elastomeric member (column 5).

The step of disposing includes forming an extension on one of the members (extension 46).

The extension includes interdigitating the extension with one of the first, second and third portions (interdigitating with the second portion).

The above method produces the seal as claimed in claims 11, 13 and 15-18. The method limitations of insert molded is considered product by process limitation, which is given little patentable weight in an apparatus claim.

6. Claims 11 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Rodenkerich (US. 5,275,420).

Rodenkerich discloses a seal having a common region (region where three portions meet, near 86) formed of elastically deformable material, at least three projections (first portion 64, second portion 18 and third portion 24) formed integrally with the common region and extending outwardly therefrom each in a discrete direction, a strain distributor (RTV silicone) formed of material significantly stiffer than the central portion (this is the case since RTV silicone are known to have hardness on shore A of 30 to 80 and silicone rubber are known to have hardness on shore A of 5 to 50, evidence is shown by Cann, US. 6,471,095 B1 and Wright, RE38,814E) and three projections and embedded in the common region (region near 86, the distributor is embedded in the common region). The distributor is formed of plastic material (RTV silicone is a resin material, hence a plastic material).

Allowable Subject Matter

7. Claims 19-26 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action. Applicant has claimed a method of sealing at a juncture of a valve deactivation manifold (manifold), an engine block, an engine cylinder head, a head gasket, a one-piece seal member of elastomeric material with three portions thereof each extending from a common region in a discrete direction, a strain distributor of material significantly more rigid than the elastomeric material and embedding the distributor

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in the elastomeric material in the common region, disposing the seal member at the juncture and contacting the edge of the sealing surface of the head gasket with one of the three portions of the seal member. This is not disclosed by the prior art of record.

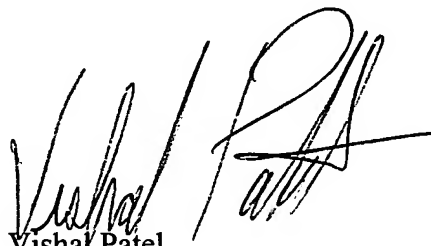
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is 571-272-7060. The examiner can normally be reached on 6:30am to 8:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather C. Shackelford can be reached on 571-272-7049. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP
January 18, 2006


Vishal Patel
Patent Examiner
Tech. Center 3600

REPLACEMENT SHEET

Title: Sealing At The Juncture of Three Members

Applicant(s): Tae-Kyung Kim

Serial No.: 10/673,809

Filing Date: 09/29/2003

Attorney Docket No.: 02-ASD-271 (EM)

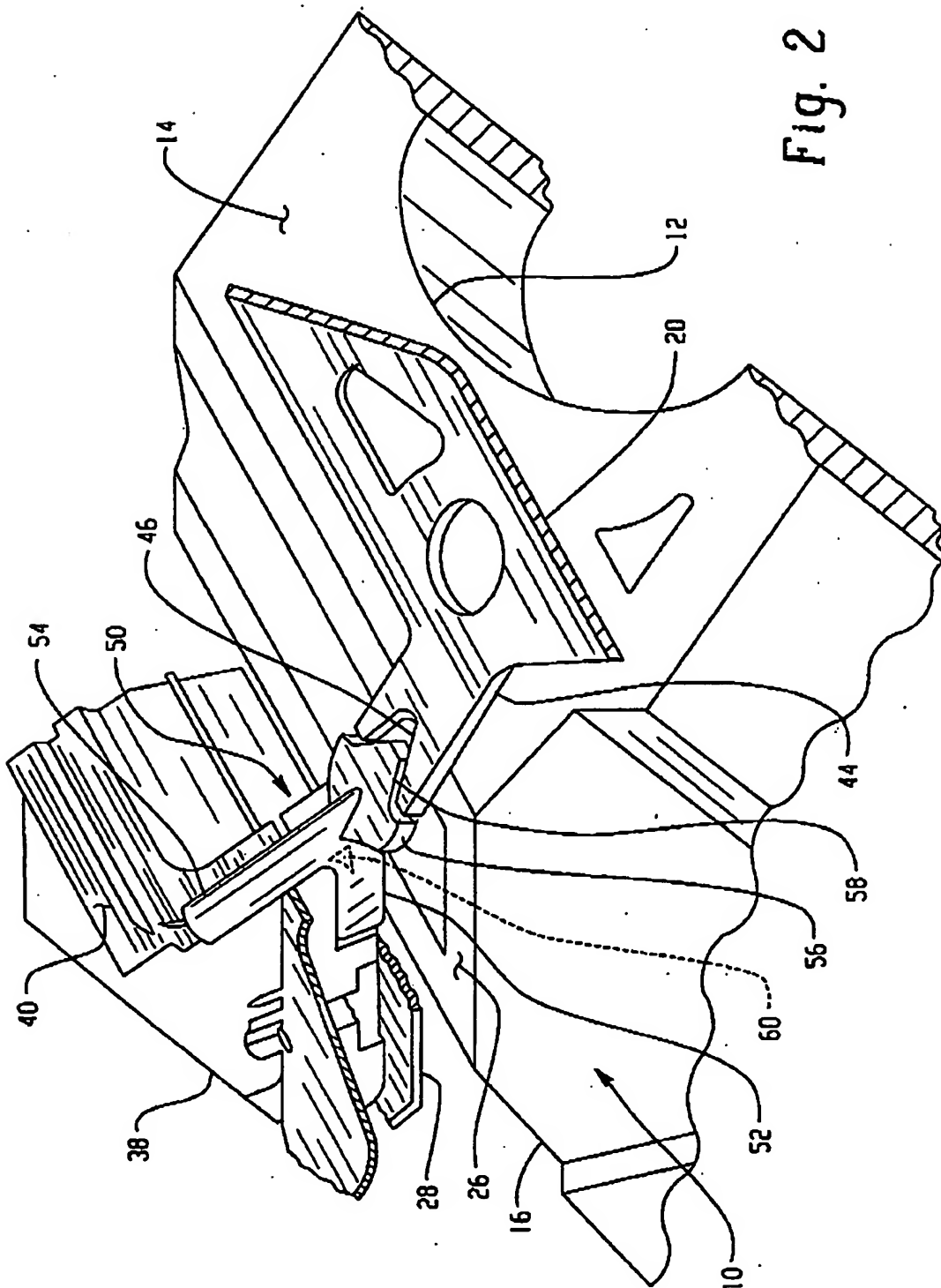


Fig. 2

APPROVED BY EXAMINER, VP, 1/18/06